

SAFETY ALERT

Crane safety on railway construction sites

This alert reminds employers and those who control railway construction sites to keep workers clear of crane loads that are under tension.

Background

Workers were replacing railway tracks and concrete sleepers with a pre-assembled switch track panel when rails sprang from the partially suspended panel. One worker died and four others were seriously injured.

Contributing factors

The incident involved correcting misaligned railway tracks on a switch track panel with the tracks of a previously laid panel. This involved removing a number of clips that held the existing rails in place on the concrete sleepers before sliding the rails of the pre-assembled panel back to correct the misalignment.

Although the switch track panel load was touching the ground at the time of the incident, most of its weight was suspended by a mobile crane. When a number of the clips were removed the rails sprang from the panel, striking some of the workers who were on the panel.

Action required

Ensure that the crane load is:

- secured before lifting
- not lifted over workers
- not ridden and that no worker is positioned on a load when that load is under tension
- kept clear of workers when load is suspended or under tension.

Only competent persons such as dogmen and riggers are allowed to work near a crane load that is under tension or suspended and they must have control of such a load at all times. The crane operator must not leave the crane unattended when a load is attached to the crane and under tension.



Note the area where rails originally placed.

Note the position of the rails that struck workers subsequent to the removal of clips.

Risk controls

When planning and coordinating railway construction work, do the following:

Establish arrangements for coordinating work activities

Where a number of contractors are working on a site, the principal contractor is responsible for the proper coordination and supervision of the work. This includes the period of time that covers the development and implementation of safe work methods statements (SWMS).

Document the risk control measures

For high-risk construction work, such as work involving a mobile crane on a railway construction site, a SWMS must be developed before starting work and in consultation with those workers undertaking the activity.

Assess the crane and its lifting attachments to determine whether it is capable of lifting the required loads

Where a load has component parts that are connected with clips or other connecting devices, and where such devices are regarded as dependent lifting attachments, obtain manufacturer's instructions on the loading limits of such devices. This information must be considered when developing relevant SWMSs.

Implement the risk control measures outlined in the SWMS

This includes the proper coordination of related activities and adequate instruction and supervision of workers. In particular, crane loads are to be manoeuvred into place through reliable methods of communication by appropriately trained, qualified and competent crane crew personnel. The load is to remain in their control at all times.

Monitor activities according to the SWMS

Where an unplanned circumstance arises that is not covered by the SWMS, then a further assessment of the potential hazards and risks should be done so that appropriate safety controls are communicated to all involved in the activity. Work should be suspended while this process occurs. Whenever a load is under tension, the crane crew need to remain vigilant and in control of the load. This is particularly important during a suspension in work activity or a change in the work process.

Revise the SWMS and resume work according to the revised SWMS

A revised SWMS is then required to be developed in consultation with those conducting the activity. The activity can only be resumed once the risk control measures outlined in the revised SWMS are in place and implemented.

Further information

The *Occupational Health and Safety Act 2000* requires employers and those who control workplaces to take all necessary steps to ensure that safe systems of work are established and maintained and that all staff are adequately informed, trained and supervised.

- Australian Standard AS 2550: 2001 *Cranes, Hoists and Winches – Safe Use Part 1: General Requirements*
- Call WorkCover on 13 10 50 or visit workcover.nsw.gov.au

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Information on the latest laws can be checked by visiting the NSW legislation website (www.legislation.nsw.gov.au).

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